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Appl. No. 10/027,751 Resp. dated Jan. 30, 2004 Reply to Office Action of 12/04/2003

## REMARKS/ARGUMENTS

Claims 1-32 are pending and remain in this application. Claims 1-5, 14-19, and 21-32 are rejected. Claims 6-13 and 20 are objected to. Reconsideration is respectfully requested.

In a previous Office Action dated Jun. 25, 2003 (PREVIOUS ACTION), the Examiner rejected Claims 1-5, 14-19 and 21-32 under 35 U.S.C. 102(e) as being anticipated by Kapetanic et al., USPN 6,529,844 (hereinafter Kapetanic et al.).

In a response to the previous Office Action (RESPONSE 1), Applicant traversed the rejection on the grounds that the Examiner had failed to establish a proper case for *prima facie* anticipation with respect to Kapetanic et al. of the claimed invention as recited in Claims 1-5, 14-19 and 21-32. In addition, Applicant reminded the Examiner that the "trier of fact must identify the elements of the claims, determine their meaning in light of the specification and prosecution history, and identify corresponding elements disclosed in the allegedly anticipating reference." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ at 485 (Fed. Cir. 1984) and that "there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." *Scripts Clinic & Research Found. V. Genentech Inc.*, 927 F.2d 1565, 18 USPQ 2d 1001, 1010 (Fed. Cir. 1991). Moreover, Applicant provided in RESPONSE 1 a thorough discussion of the specific differences between the claimed invention and the disclosure of Kapetanic et al.

In the present Office Action dated Dec. 4, 2003 (PRESENT ACTION), the Examiner has once again rejected Claims 1-5, 14-19 and 21-32 under 35 U.S.C. 102(e) as being anticipated by Kapetanic et al. and has repeated, essentially verbatim from the PREVIOUS ACTION, the reasons for the rejection. In addition, the Examiner responded to Applicant's traversal in RESPONSE 1 by stating, in part, "a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process..." and by asserting that Kapetanic et al. discuss dynamic range in Col. 3, Lines 19-21, and Col. 4, Lines 16-20. The Examiner was silent on the bulk of Applicant's arguments from RESPONSE 1. Moreover, the Examiner failed to provide any further evidence or argument to support a case for *prima facie* anticipation beyond not giving patentable weight to the preamble.

Applicant believes that the Examiner's failure to establish a case for prima facie anticipation was clearly addressed in RESPONSE 1 and is unsure why the lack of support for a case of prima facie anticipation was not abundantly clear to the Examiner from the aforementioned arguments. It is also unclear why the Examiner failed to respond to Applicant's other arguments from RESPONSE 1. On the assumption that the Examiner merely overlooked and/or misinterpreted some of Applicant's arguments from RESPONSE 1, Applicant respectfully provides a restatement of these arguments from RESPONSE 1 for the Examiner's convenience and further reconsideration.

Applicant once again traverses the rejection of Claims 1-5, 14-19 and 21-32 under 35 U.S.C. 102(e) as being anticipated by Kapetanic et al. Contrary to the Examiner's contention, Kapetanic et al. fail to disclose or even to suggest *all* of the elements and/or limitations recited in any one of Applicant's base Claims 1, 16, and 27.

Specifically, Kapetanic et al. at least fail to disclose "compensating for an effect that compression of the receiver channel has on a magnitude response and a phase response of the receiver channel", as recited in Claim 1 of the instant patent application. Specifically, Col. 8, Lines 1-7, of Kapetanic et al., which was relied upon by the Examiner in the rejection of Claim 1, disclose compensating for a phase inversion in the mixing process using phase flips (emphasis added). Clearly, compensating for phase inversion is neither the same as nor would it be viewed by a person of ordinary skill in the field of the invention to be the same as "compensating for an effect that compression of the receiver channel has on a magnitude response and a phase response of the receiver channel", as recited in Applicant's Claim 1.

Moreover, even when considering the disclosure of Kapetanic et al. as a whole, nowhere is there found any discussion or suggestion of "compensating for an effect that compression of the receiver channel has on a magnitude response and a phase response of the receiver channel". In short, Kapetanic et al. are silent on test system receiver channel compression or an effect that such test system compression has on data generated for a device under test (DUT).

With respect to Claim 16, Kapetanic et al. at least fail to disclose any or all of "characterizing a reference receiver channel ..."; "characterizing a second receiver

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channel of the test system ..."; and "compensating for an effect that compression of one or both of the reference channel and the second channel has on measured magnitude data and measured phase data", as recited in Claim 16 of the instant application. Specifically, Figure 2 of Kapetanic et al. illustrates "additional components included in a conventional VNA to measure noise figure" while at Col. 2, Lines 15-19, Kapetanic et al. disclose "applying vector corrections using the VNA to compensate for DUT or system mismatches when the noise figure measurements are made". Plainly, Kapetanic et al. are not disclosing or suggesting "characterizing a reference receiver channel ... "; "characterizing a second receiver channel of the test system ..."; and "compensating for an effect that compression of one or both of the reference channel and the second channel has on measured magnitude data and measured phase data" in either Figure 2 or at Col. 2, Lines 15-19 as contended by the Examiner. Moreover, nowhere else in Kapetanic et al. is there such disclosures, as recited in Applicant's Claim 16. Respectfully, to contend otherwise is simply incorrect.

Regarding Claim 27, Kapetanic et al. at least fail to disclose a "computer program implementing instructions that compensate for an effect on the generated data caused by the receiver channel being compressed", as recited in Applicant's Claim 27. For the rejection of Claim 27, the Examiner relied upon Figure 2, Figure 3, Figure 7 reference number 764, and col. 2, lines 50-55 of Kapetanic et al.

Figure 2 is discussed hereinabove. Figure 3 illustrates an external automatic calibration of a VNA and "shows additional components included in a conventional VNA for automatic calibration" (i.e., a switched short, open, load, thru calibration standard). Figure 7 of Kapetanic et al. illustrates a vector network analyzer (VNA). Specifically, reference number 764 simply refers to a processor internal to the VNA that controls various functions thereof. Furthermore, at col. 2, lines 50-55, Kapetanic et al. disclose that the "controller is programmed to function as the user, and sends information to the VNA's processor to set up and run each calibration step after each calibration component is connected by internal switches in the automatic calibration device to the terminals of the VNA".

Neither in the cited figures or sections of Kapetanic et al. relied upon by the Examiner, nor in any other figure or section of Kapetanic et al. for that matter, is there

a disclosure of a "computer program implementing instructions that compensate for an effect on the generated data caused by the receiver channel being compressed", as recited in Claim 27 of the instant application.

As noted hereinabove, the courts have held that in order to maintain an anticipation rejection, the "trier of fact must identify the elements of the claims, determine their meaning in light of the specification and prosecution history, and identify corresponding elements disclosed in the allegedly anticipating reference." Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., supra, "there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." Scripts Clinic & Research Found. V. Genentech Inc., supra. Moreover, the courts have established that each element disclosed by the reference must be "arranged as in the claim". Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., supra, and have concluded that, "if the examination at the initial stage does not produce a prima facte case of unpatentability, then without more the applicant is entitled to grant of patent". In re Oelrich, 977, F.2d 1443, 24 USPQ 2d 1443 (Fed. Cir. 1992).

As discussed hereinabove, the Examiner has failed to establish a case for prima facie anticipation with respect to Kapetanic et al. In particular, the Examiner at least has failed to show that there is no difference between the claimed invention and the reference disclosure, and has failed to establish each element of Applicant's claimed invention arranged as in the claim. Therefore, the rejection of base Claims 1, 16, and 27 under 35 U.S.C. 102(e) is unsupported and should be withdrawn.

Claims 2-15 ultimately depend from and include all of the limitations of base Claim 1, Claims 17-26 ultimately depend from and include all of the limitation of base Claim 16, and Claims 28-32 ultimately depend from and include all of the limitations of base Claim 27. Having failed to establish a case of *prima facie* anticipation for the base Claims 1, 16, and 27, the Examiner has similarly failed to establish a case of *prima facie* anticipation for Claims 2-15, 17-26, and 28-32. As such, the rejection of Claims 1-5, 14-19 and 21-32 under 35 U.S.C. 102(e) similarly should be withdrawn.

As mentioned hereinabove, in the Examiner's response to Applicant's arguments in RESPONSE 1, the Examiner stated that "a method of extending

dynamic range of a test system that has a receiver channel comprising" was not given patentable weight because the recitation occurs in the preamble. Applicant respectfully disagrees with the Examiner's statement. However that notwithstanding, Applicant asserts that the Examiner's argument is most with respect to establishing and maintaining a case of *prima facie* anticipation with respect to Kapetanic et al.

In addition, the Examiner stated in response to Applicant's arguments in RESPONSE 1 that Applicant states "that there is no mention to dynamic range in Kapetanic et al.". The Examiner cited discussions by Kapetanic et al. of "dynamic range" at Col. 3, Lines 19-21 and Col. 4, Lines 16-20. Again, Applicant respectfully submits that such arguments are moot with respect to establishing and maintaining a case of *prima facie* anticipation in view of Kapetanic et al.

However, for the record and contrary to the Examiner's aforementioned statement, Applicant did not contend that there was "no mention of dynamic range" in the disclosure of Kapetanic et al. Instead, in RESPONSE 1 Applicant stated that "the only mention of 'dynamic range' in Kapetanic et al. is with regard to DUT dynamic range and a need for producing accurate measurements of DUTs having wide dynamic range (e.g., Col. 3, Line 20, and Col. 4, Lines 16-19). As employed in Kapetanic et al., DUT dynamic range is unrelated to test system dynamic range." (Page 6 of 10, 2<sup>nd</sup> paragraph, RESPONSE 1).

Applicant's assertions in RESPONSE 1 regarding the dynamic range disclosures of Kapetanic et al. were meant to assist the Examiner in understanding the differences between that disclosed by Kapetanic et al. and the claimed invention. Specifically at Col. 3, lines 19-21, Kapetanic et al. disclose a general need for wide dynamic range components in high frequency system stating that "Because of the increasing need for wide dynamic range at high frequencies, most wideband amplifiers, as well as other microwave and millimeter wave components, now have distortion specification". Specifically at Col. 4, lines 16-20, Kapetanic et al. disclose that "With the dynamic range of DUTs which are typically tested increasing, it is further desirable to provide a VNA which can provide more accurate measurements over the dynamic range". As noted hereinabove and as stated in RESPONSE 1, neither in these two sections cited by the Examiner nor anywhere else in Kapetanic et

al. is there a disclosure of dynamic range or extending dynamic range of a test system. In light of these remarks, reconsideration is respectfully requested.

The Examiner objected to Claims 6-13 and 20 as being dependent from rejected base Claims 1 and 16, respectively. However, the Examiner observed that Claims 6-13 and 20 would be allowable if rewritten in independent form including the limitations of the base claims and any intervening claims.

Again, Applicant appreciates the Examiner's acknowledgement of allowable subject matter in Claims 6-13 and 20. However, it is submitted that Claims 6-13 ultimately depend from and include all of the limitations of base Claim 1 and that Claim 20 ultimately depends from and includes all of the limitations of base Claim 16. For the reasons discussed above, the Examiner has failed to establish *prima facie* anticipation of base Claims 1 and 16. Therefore, reconsideration and withdrawal of the objection to Claims 6-13 and 20 are respectfully requested.

In summary, Claims 1-32 are pending. Claims 1-5, 14-19 and 21-32 were rejected. Claims 6-13 and 20 were objected to. As detailed hereinabove, Applicant believes original Claims 1-32 are in condition for allowance. It is respectfully requested that Claims 1-32 be allowed, and that the application be passed to issue at an early date.

Should the Examiner have any questions regarding the above, please contact the undersigned, J. Michael Johnson, telephone number (775) 849-3085, or John L. Imperato, Attorney for Applicant, Registration No. 40,026 at Agilent Technologies, Inc., telephone number (650) 485-5511.

Respectfully submitted,

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